



Regular Board Meeting

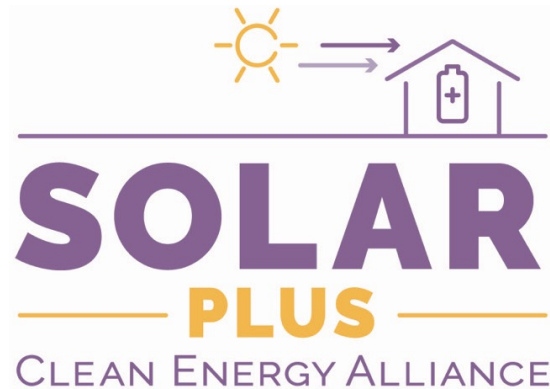
October 26, 2023

Item 6: Solar Plus Residential Distributed Microgrid Rates and Agreements

Item 6: Solar Plus Program

- Recommendation:
 - Conduct Public Hearing
 - Adopt Resolution 2023-009 Setting Rates for Solar Plus Program effective 11/1/23
 - Approve Power Purchase, Program Support, Program Management and Framework Distributed Microgrids Agreement.
- CAC received presentation on Solar Plus and support the program offering.

Introducing



- \$0 upfront costs to homeowners for solar + batteries
- Lowest \$/kWh available in the market (to the end customer)
- Long-term customer pricing stability
- Available to all customers and easily transferrable
- No operational and maintenance costs to homeowners
- 100% renewable energy and emergency backup power
- An allocation for improvements related to the installation is included in the proposed rates



Benefits of a Distributed Microgrid

For the Customer:

- Creates **RESILIENCY** by enabling whole home back-up
- Generates and consumes **SOLAR** on site, pulling from the batteries to significantly avoid utility delivery costs and the negativities of NEM 3.0
- Promotes **EQUITY** by providing a simple, competitive, \$0 up-front cost, no FICO requirement path to go solar + batteries

For CEA:

- Creates **GRID STABILITY** and power pricing certainty
- **GREEN ENERGY** is created locally and provides renewable energy credits to meet CEA's requirements
- Supports **CEA CUSTOMER RETENTION** by providing customers with the best value offer in the market (which maintains load flowing through CEA long term)

The program partners?



Tesla, Inc.

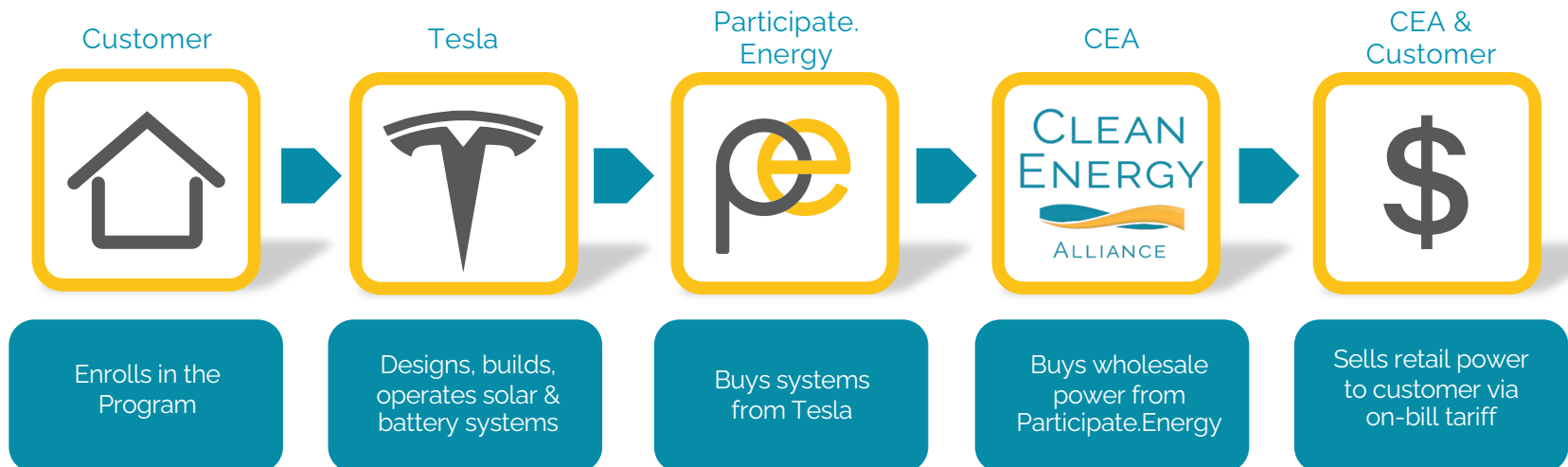
- Leading electric vehicle, charging infrastructure, solar and battery manufacturer.
- Offers Turnkey residential, new homes, commercial and utility scale solar and battery operations throughout CA.



Participate.Energy LLC

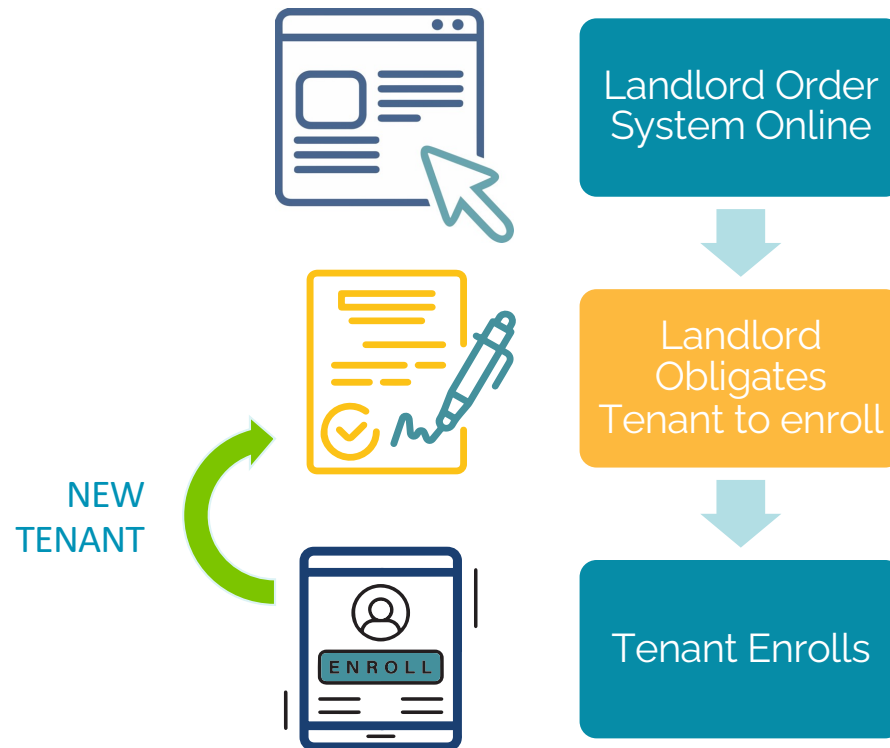
- Team comes from Corporate Credit, Inc. founded in 1994.
- Over 250MW of rooftop solar developed since 2008.
- Co-developed with Tesla, ~\$300,000,000 of SGIP ER battery projects.
- Lent over \$5 billion of corporate loans in connection with tax-based transactions.
- Focused on developing, capitalizing and managing the JPA Fund - including on-going operations.

Program process



Residential Renters Program

- Same program with Landlord commitment and Tenant participation
- No credit underwriting
- Seamless transfer to new tenant (no underwriting)
- Pass-through terms and pricing from tenant to tenant
- Fixed pricing and increases over time
- Upon request, can provide landlord with template legal language for tenants

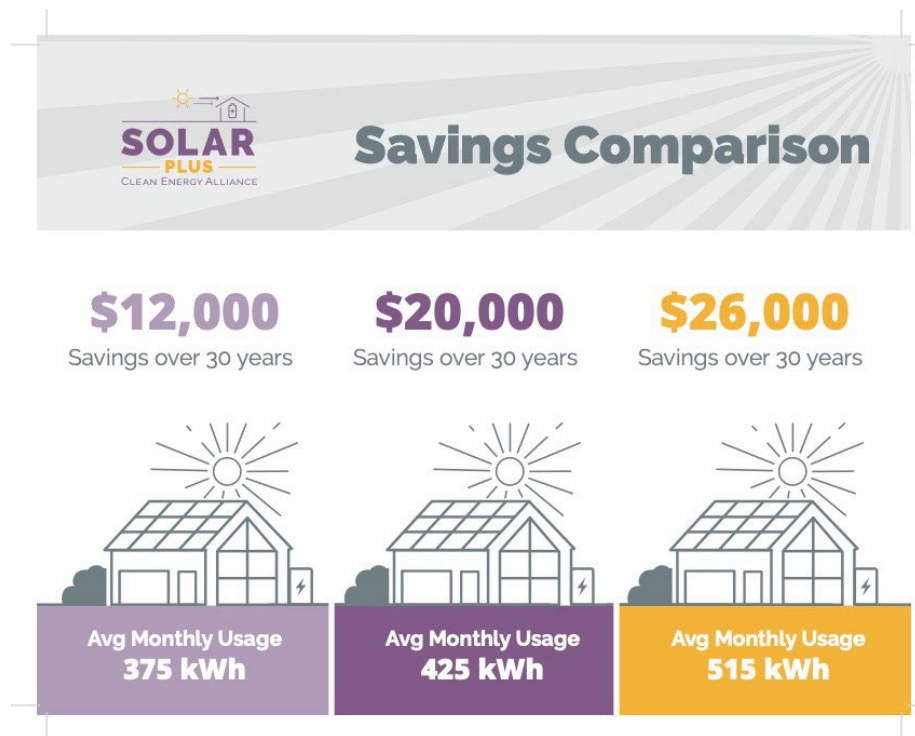


Item 6: Solar Plus Program

- Solar Plus Proposed Rates

Rate	
\$0.145/kWh	With Pre-Construction Costs of \$750 or less
\$0.15 /kWh	With Pre-Construction Costs of \$751-\$2,500
\$0.155/kWh	With Pre-Construction Costs of \$2,501-\$5,000
\$115/Month	Battery Fee – 1 st Battery
\$75/Month	Each additional Battery

Item 6: Solar Plus Program



Item 6: Solar Plus Program

- There are four agreements that CEA executes to establish the Program:
- **Power Purchase Agreement** – establishes the terms, conditions, and price for CEA’s purchase of the solar energy and provides the rights for CEA to claim the renewable attributes of the energy;
- **Program Management Agreement** – establishes CEA’s responsibilities to market the program to CEA’s customers and encourage participation in the Distributed Microgrids Program, for which CEA will be compensated by Participate.Energy;
- **Program Support Agreement** – establishes CEA’s responsibilities to provide program support for the systems, for which CEA will be compensated by Participate.Energy;
- **Framework Distributed Microgrids Program Agreement** - establishes the terms and conditions under which CEA, Participate and Tesla, Inc. will perform.

Questions/Discussion

Item 8: Wholesale Market Access Tariff Terms & Conditions; Channelside WMAT & Positive Enrollment Agreements

Item 8: WMAT Terms & Conditions; Channelside WMAT and Positive Enrollment Agreements

- Recommendation:
 - Approve Wholesale Market Access Tariff Terms and Conditions;
 - Approve Channelside Wholesale Market Access and Positive Enrollment Agreements with San Diego Water Authority and Poseidon Resources, LP (Channelside) for enrollment of Channelside account at the Carlsbad Desalination Plant; Authorize the CEO to execute all documents subject to General Counsel approval.

Item 8: WMAT Terms & Conditions; Channelside WMAT and Positive Enrollment Agreements

- Background:
 - July 27, 2023 CEA Board approved MOU with SDCWA & Channelside for development of WMAT related to consideration of serving the large Channelside load.
 - Staff, technical consultants and legal team (General Counsel and Transactions Atty) have worked on development of WMAT Tariff and Channelside Agreements.
 - Priority – mitigate risks to CEA and its customers related to serving Channelside and the normal opt-out rights of CEA's customers

Item 8: WMAT Terms & Conditions; Channelside WMAT and Positive Enrollment Agreements

- WMAT Terms and Conditions
 - Available to CEA customers that meet the following:
 - Non-Residential Accounts within CEA's service territory
 - Annual load greater than 150GWh
 - Execution of WMAT Agreement
 - Concurrent execution of Positive Enrollment Agreement
 - Not enrolled in Net Energy Metering

Item 8: WMAT Terms & Conditions; Channelside WMAT and Positive Enrollment Agreements

- Benefit to CEA
 - Consistent with JPA goal of reducing GHG Emissions
 - New predictable revenue stream to CEA
 - Risks of load mitigated through agreement terms
 - Minimum 3-year opt-out notice period
 - Customer pays full costs related to their load – no cross subsidization from other CEA customers
- Benefit to Customer
 - Enrollment in power supply with higher renewable energy content
 - Must meet CEA's minimum renewable of 50% increasing to 100% by 2035
 - More control over energy supply – participate in power procurement

Item 8: WMAT Terms & Conditions; Channelside WMAT and Positive Enrollment Agreements

- WMAT Rate Setting
 - CEA Board has full rate setting authorization
 - Rate approved in Public Hearing – consistent with all CEA's rates
 - WMAT customer bears risk/benefits of related to rate volatility
 - Methodology (consistent with typical energy rate setting):

Administrative Cost Component: (CEA budgeted non-power supply expenses + reserves)/CEA forecasted load (excluding WMAT load) = per kWh Administrative Cost Component

Energy Rate = Total WMAT Conventional Energy hedge contracts + (current forward price curve * open position) + Resource Adequacy Costs + Short-term energy costs + Long-Term Renewable Energy Costs = Total Energy Costs. Total Energy costs/WMAT forecasted load = per kWh Energy rate

Per kWh Administrative Cost Component + Per kWh Energy Rate = Total WMAT Rate

Item 8: WMAT Terms & Conditions; Channelside WMAT and Positive Enrollment Agreements

- About Channelside:
 - Carlsbad Desalination Plant owned by Poseidon Resources, LP (Channelside)
 - Located in City of Carlsbad
 - San Diego County Water Authority has decision-making authority related to energy provided through Water Purchase Agreement
 - Desalination Plant is largest in US, delivering nearly 10% of regions water supply
 - SDCWA has electric provider decision-making authority through Water Purchase Agreement with Poseidon Resources, LP

Item 8: WMAT Terms & Conditions; Channelside WMAT and Positive Enrollment Agreements

- Channelside WMAT & Positive Enrollment Agreements
 - Effective January 1, 2024
 - Account enrollment no earlier than January 1, 2025
 - SDG&E assigned 2024 PCIA Vintage
 - Procurement Plan development beginning January 2024
 - Comply with CEA's Energy Risk Mgmt Policy and CEA's compliance requirements
 - New Scheduling Coordinator ID established for the Channelside Load
 - Provides ability to track energy costs
 - Rates established November 2024
 - Monthly tracking – if more than 10% variance not anticipated to correct by year end subject to rate adjustment
 - Annual True-up – overages and underages rolled into following year rates
 - Minimum 3-year opt -out notice, or tied to longest term contract whichever is longer

Questions/Discussion

Item 9: Consider Approval of Clean Energy Alliance Solar Billing Plan (NEM 3.0)

Item 9: CEA Solar Billing Plan (NEM 3.0)

- Seeking direction:
 - Implement Solar Billing Plan (SBP) to mirror SDG&E's SBP and maintain CEA's current Net Surplus compensation methodology effective December 15, 2023; or
 - Implement a Modified SBP to mirror SDG&E's SBP and provide a \$0.01 per kWh premium to the Avoided Cost Component; maintain CEA's current NSC methodology effective December 15, 2023; or
 - Do not implement SBP.

Item 9: CEA Solar Billing Plan (NEM 3.0)

- Background:
 - 12/2020 - CEA's current Net Energy Metering Personal Impact approved
 - Mirrors SDG&E's NEM 1.0 and 2.0
 - Set NSC at \$0.06 per kWh for excess generation at end of 12-month relevant period
 - 12/2022 – CPUC approved Decision 22-12-056 implementing SBP, successor to NEM 2.0

Item 9: CEA Solar Billing Plan (NEM 3.0)

- SDG&E CPUC Approved SBP
 - Effective for NEM applications after 4/15/23
 - Not applicable for NEM 1.0 & 2.0 legacy customers until end of their legacy period
 - Changes methodology for calculating charges and credits
 - Customers placed on rate TOU-EV5 instead of TOU-DR1
 - Changes from an annual true-up to monthly true-up
 - Changes Net Surplus Compensation calculation methodology
 - Estimates solar system payback increases from 5-years to 9-years
 - Incentivizes battery storage
- CEA is not required to implement SBP

Item 9: CEA Solar Billing Plan (NEM 3.0)

- Charges & Credits Methodology Changes

- NEM 2.0 methodology:

- kWh generated netted against kWh usage for each time of use period
 - Rate calculated as: net kWh * retail rate in effect with either a net \$ credit accrued or net charge incurred

- SBP methodology

- kWh generated is credited using the Avoided Cost Calculator, not the retail rate in effect (Export Credit)
 - Evaluated on an hourly basis
 - kWh used charge is calculated based on retail rate in at time of usage (Import Charge)
 - Export credit and import charge are netted for resulting credit or charge

Item 9: CEA Solar Billing Plan (NEM 3.0)

- Analysis of current CEA NEM customer data results:
 - Increases average NEM customer generation costs \$42 per month (NEM 2.0 vs SDG&E SBP)
 - Results will vary depending on usage for individual customer
 - Results improve with additional of battery storage
 - Customer can fill battery during off-peak hours and use battery energy during on-peak hours
 - Avoids generation and T & D costs
 - CEA only has generation cost data, so unable to calculate a total bill impact

Item 9: CEA Solar Billing Plan (NEM 3.0)

- Current CEA NEM customers:
 - 22,200 residential
 - 300 – commercial

- NEM 1.0 – 6,500
- NEM 2.0 – 16,000

Item 9: CEA Solar Billing Plan (NEM 3.0)

- New SBP customers placed on NEM 2.0 temporarily until December 15, 2023, when SDG&E is expected to have billing system upgrades complete
- CEA customers will be placed on SBP for SDG&E T&D regardless of whether CEA adopts SBP

Item 9: CEA Solar Billing Plan (NEM 3.0)

Maintain its existing NEM program for new solar and NEM 1.0 and 2.0 legacy customers.

- Does not offset SBP T&D increases for customers;
- CEA NEM customers would see this as a benefit compared to SDG&E bundled service;
- CEA would not realize the new revenue generated by SBP;
- The SDG&E T & D side of bill would be calculated on a different methodology than the CEA Generation side, which could cause customer confusion;
- It would be difficult to calculate rate comparisons between SDG&E and CEA.

Item 9: CEA Solar Billing Plan (NEM 3.0)

Default to SDG&E's new SBP using SDG&E's ACC to determine the energy generation export credit.

- Affected customers would be on parity with SDG&E;
- Potential for new revenue for CEA (avg \$42 per month per customer enrolled in SBP);
- T & D and Generation services would be calculated on same basis on customer bill, reducing possibility of confusion;
- Simplifies rate comparison between SDG&E and CEA;
- Estimated new revenue \$160,800 in year 1 growing to \$804,000 in year 5 (assumes 200 new customers per year).

Item 9: CEA Solar Billing Plan (NEM 3.0)

Adopt SDG&E's new SBP with an additional premium added to the export credit (modified SBP).

- Provides a higher export rate to affected customers, resulting in a lower cost compared to SDG&E;
- Potential for new revenue for CEA, decreased by the premium adder;
- T & D and Generation services would be calculated on same basis on customer bill, reducing possibility of confusion;
- Simplifies rate comparison between SDG&E and CEA;
- Estimated cost \$4 per month per customer
 - Funded through new revenue stream
- If adopted, CEA recommends a 5-year effective period – CEA Board revisit at end of 5-years.
- Modified SBP Annual revenue to CEA estimated at \$151,200 in first year growing to \$756,000 by year 5 (assumes 200 new enrolled customers).

Item 9: CEA Solar Billing Plan (NEM 3.0)

- Net Surplus Compensation
 - Under SBP the Export credit (based on ACC) is deducted from NSC.
 - Avoids “double credit” of excess generation
- Staff recommends CEA maintain its current NSC methodology as a benefit to being a CEA customer
 - Not a new cost – CEA currently budgets for this benefit
- CAC considered SBP and majority support CEA adopt the modified SBP

Questions/Discussion

Item 10: Consider Feed-in-Tariff (Community Solar)

Item 10: Feed-in-Tariff (Community Solar)

- Recommendation:
 - Approve establishment of Feed-in-Tariff (Community Solar) Program with recommended criteria and direct staff to develop a marketing campaign, program guideline, application and power purchase agreement and return to Board for approval.

Item 10: Feed-in-Tariff (Community Solar)

- The CEA Board and Community Advisory Committee have previously prioritized establishment of a Feed-in-Tariff, also known as Community Solar.
- Incentivizes locally situated small-scale renewable energy projects
- Priced to recognize the value of locally generated renewable energy
- Standard offering as opposed to Request for Offers

Item 10: Feed-in-Tariff (Community Solar)

- Standard offering:
 - Pre-determined price CEA will pay
 - Delivery term – typically 10-years or longer
 - Project size limitations
 - Power Purchase agreement

Item 10: Feed-in-Tariff (Community Solar)

- Recommended offering based on research of similar projects
 - Must be within CEA territory
 - Projects 500kW – 1MW in size
 - Initial offering no more than 4 projects
 - Based offer price \$85/MWh
 - Bonus offer price \$15/MWh co-located battery storage
 - \$500 non-refundable deposit with application
 - 20-year term
 - New-build projects
 - Renewable Energy Credits to be transferred to CEA

Item 10: Feed-in-Tariff (Community Solar)

- Program guidelines to be consistent with CEA's Inclusive & Sustainable Workforce Policy
- Community Advisory Committee considered program and majority support the development of Community Solar Program.
- Program funds would come from CEA's adopted FY 2023/24 Power Supply budget.

Questions/Discussion